

**REMARKS/ARGUMENTS**

Claims 1-36 are pending. By this Amendment, claims 1-23 and 25-28 are amended solely as formal matters, and claims 29-36 are added. Reconsideration in view of the above amendments and the following remarks is respectfully requested.

As a preliminary matter, the Examiner is kindly requested to confirm Applicant's claim for priority based on PCT/EP2003/011524 which, in turn, claimed priority to DE 102 48 490.9.

**Allowable Subject Matter**

Applicant notes with appreciation the indication that claims 19, 20, and 23 would be allowable if rewritten in independent form including all of the limitations of their respective base claims. Applicant has added independent claims 34-36, which correspond to claims 19, 20, and 23, respectively.

**Formalities-Based Objections and Rejections**

It appears that at least claims 2-3, 5-9, 11-14, 16-19, 21-23, and 26 have been objected to as allegedly including various informalities. Without acquiescing to the propriety of the various objections, Applicant has amended these claims solely as a formal matter to improve the forms thereof. Thus, reconsideration and withdrawal of these objections are respectfully requested.

Claim 12 stands rejected under 35 U.S.C. § 112, first paragraph, as allegedly failing to comply with the enablement requirement. Without acquiescing to the propriety of the rejection, claim 12 has been amended solely as a formal matter to improve the form thereof and to obviate this rejection. Additionally, Applicant notes that support for claim 12 can be found at least in paragraph 16 of U.S. Publication No. 2006/0037614 (i.e., the publication corresponding to this application). Thus, reconsideration and withdrawal of this rejection are respectfully requested.

Claims 9, 11, and 14-16 stand rejected under 35 U.S.C. § 112, second paragraph, as allegedly failing to particularly point out and distinctly claim the subject matter the applicant regards as the invention. Without acquiescing to the propriety of the rejection, Applicant has amended these claims solely as a formal matter to improve the forms thereof. Thus, reconsideration and withdrawal of this rejection are respectfully requested.

**Rejections under 35 U.S.C. §§ 102(b) and 103(a)**

Claims 1, 5, 8, 13, 14, 16, and 24-28 stand rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by Axe (U.S. Patent No. 6,085,747). This rejection is respectfully traversed for at least the following reasons.

In order for a claim to be anticipated, each and every limitation of that claim must be disclosed within a single reference. Axe does not disclose each and every limitation of claim 1. For example, Axe fails to disclose “generating evaluation results of the measurement signal indicative of the respiratory gas flow via differentiation, the evaluation results permitting classification between obstructive and central breathing disorders.” Thus, Axe does not anticipate claim 1.

In connection with claims 5, 8, and 16, the Office Action states that Axe discloses “repeatedly finding the first derivative of the signal representing respiratory flow – that is, the area under the signal’s curve – to evaluate the patient’s breathing disturbances (column 5, lines 56-58; column 8, lines 37-39; figure 14).” These cited portions do appear to suggest finding the areas underneath curves, as alleged in the Office Action. However, finding the area underneath a curve is analogous to integration, and not differentiation. Accordingly, these cited portions of Axe actually teach a very different mathematical procedure from that involved in claim 1. As such, Axe does not teach or suggest “generating evaluation results of the measurement signal

indicative of the respiratory gas flow via differentiation, the evaluation results permitting classification between obstructive and central breathing disorders,” and thus fails to anticipate claim 1.

Similar to claim 1, claim 25 recites “a signal processing device configured to generate, based on a variation in respiratory cycle-specific reference features obtained via differentiation, an evaluation result which is indicative of whether or to what extent a prevailing or imminent breathing disorder is of obstructive or central origin,” and claim 27 recites “a signal processing device configured to generate, based on a variation in respiratory cycle-specific reference features obtained via differentiation, evaluation results indicative of whether or to what extent the measurement series contains sequences which are to be classified as a breathing disorder of obstructive or central origin.” As noted above, Axe discloses integration, which is mathematically very different from the claimed differentiation involved in claims 25 and 27. Thus, Axe fails to anticipate claims 25 and 27.

In view of the above, reconsideration and withdrawal of this Section 102(b) rejection are respectfully requested.

Claims 10 and 18 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Axe in view of Berthon-Jones (U.S. Patent No. 6,029,665), and claims 2-4, 6-7, 11, 17, and 21-22 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Axe in view of Rapoport (U.S. Patent No. 5,335,654). These rejections are respectfully traversed.

Applicant respectfully submits that the introduction of Berthon-Jones and Rapoport fail to make up for the fundamental deficiencies noted above with respect to Axe. Therefore, even if Berthon-Jones and Rapoport were combined with Axe, the resulting combination still would fail to render obvious claims 2-4, 6-7, 10-11, 17-18, and 21-22.

Thus, reconsideration and withdrawal of these Section 103(a) rejections are respectfully requested.

**New Claims 29-33**

New claims 29-33 have been added to provide further protection for the disclosed subject matter. More particularly, claims 29 and 30 respectively state that the derivatives recited in claims 5 and 8 are first derivatives, as previously recited in these claims. Similarly, claims 31 and 32 respectively state that the predetermined percentage of claim 11 is 10%, and that the predetermined interval of claim 16 is 10%, as previously recited in these claims. Claim 33 states that the elastic properties of the upper respiratory tracts include restoring modulus and/or modulus of elasticity, as originally recited in claim 23. Claims 29-33 should be allowable at least by virtue of their respective indirect dependences from independent claim 1.

**Conclusion**

In view of the above amendments and remarks, Applicant respectfully submits that all the claims are patentable and that the entire application is in condition for allowance. Should the Examiner believe that anything further is desirable to place the application in better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number below.

Respectfully submitted,

**NIXON & VANDERHYE P.C.**

By:

  
Paul T. Bowen  
Reg. No. 38,009

PTB/JR:lmj  
901 North Glebe Road, 11th Floor  
Arlington, VA 22203-1808  
Telephone: (703) 816-4000  
Facsimile: (703) 816-4100